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ABSTRACT

The Caddo Career Center, a secondary vocational-technical school located in Shreveport, Louisiana, has undertaken an innovative approach to solving two problems common to vocational education: (1) how to provide time for vocational instructors to return to the "world of work" in order to keep up-to-date on computer technology; and (2) how to provide exposure to computer applications for vocational students. An in-school effort to make computer applications possible in all areas began in the 1983-84 school year; vocational educators, on release time from classes, volunteered to become computer literate. The administration provided substitutes or teachers covered for each other to provide release time. Through creative use of funds made available by the local school board for staff development, trade instructors began cross-training in the summer of 1985; additionally, for one week during the school year while students were in the computer lab, the area instructor went into business or industry or back to school for on-the-job computer training experiences. Students used the lab weekly to learn computer and technology literacy or programming; the schedule also provided time for the students to take a field trip to observe current technology in their field of study. An outgrowth of these activities has been the Technology Fair--a 2-day and evening showcase where students demonstrate computer related technology for parents and prospective students. The Caddo Career Center believes in providing these opportunities so that its students will be prepared to enter the work force and accept and conquer the challenges posed by technological changes. Results of student computer use for the spring of 1985 are appended. (JB)

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A Head Start in Computer Technology: How Release Time for Teachers Can Give Students an Advantage

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This presentation describes an innovative approach to solving two common problems:

(1) how to provide time for vocational instructors to return to the "world of work" in order to keep up-to-date on computer technology, and

(2) how to provide exposure to computer applications for vocational students.

This computer application/on-the-job training update program, which began on a small scale three years ago at the Caddo Career Center in Shreveport, Louisiana, was initially funded by in-school funds. It is currently funded as a permanent program at the expense of the local school board. This program represents a cooperative effort between the staff at the Caddo Career Center and business and industry in the community.

The presenters provide for the participants a copy of the proposal, written to request funding for the project. Examples of student pre-computer lab questionnaires, lesson plans, two examinations and grade sheets developed by the current computer instructors are shared. The proposal contents, handouts, data collected from students' and instructors' evaluation, and staff and community cooperation are discussed. From this cooperative effort, students, instructors and the community benefit by providing for the advancement of computer technology in vocational education. Tying this session together is a slide presentation on the success of the career center staff in keeping abreast of computer technology for themselves and their students.

This session's implications are not only for career centers but could serve regular vocational classes in a comprehensive high school, thereby benefiting an entire school system's vocational program.

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A HEAD START IN TECHNOLOGY

Introduction

Located in Shreveport, Louisiana, the Caddo Career Center is a source of pride for the Caddo Parish School Board. This secondary vocational-technical school, recognized as a model in the state, attracts juniors and seniors from 10 of our 11 high schools. Theory along with hands-on experiences prepare students for employment with saleable skills and technical knowledge in 20 areas from auto mechanics to insurance to electronics and computer repair.

Businesses and industries which hire Caddo Career Center students have long regarded the school and its graduates with respect. This respect is maintained because the administration does not rely on past accomplishments. Instead the Caddo Career Center responds to challenges posed by ever-increasing technological advances. The Caddo Career Center recognizes that the absence of a response to these major educational challenges would contribute to technical illiteracy and would widen the gap between educational "haves" and "have nots."

How Does the Curriculum Stay Current?

Partnerships between the school, and business and industry are one way to meet these challenges. The administration and faculty plan for and nuture community involvement. Common goals, developed by instructors and advisory groups in each program area, help determine the curriculum offered at the Caddo Career Center. By working together, the key goals are realized--increased productivity for business and industry and employment for graduates.

The Caddo Career Center prepares workers who can make effective decisions and adapt to technological changes while business and industry provide jobs which permit educated workers to use their skills and knowledge.

How do the educators keep abreast?

An in-school effort to make computer applications in all program areas began in the 1983-84 school year. The beginnings of this computer technology endeavor saw vocational educators on released time from classes and volunteering to spend time after school to become computer literate themselves. The administration provided substitutes or teachers covered for each other to provide that released time.

Through creative use of funds made available by the local school board for staff development, trade instructors began cross-training in the summer of 1985. Electronics was the first area selected for cross-training; an effort to get a working knowledge of another area. Plans are to have cross-training for instructors in other areas because current employment trends indicate that an employee needs to be a "jack of all trades." By cross-training, an instructor has more knowledge to share with students.

Additionally, for one week during the school year while the students are in the computer lab, the area instructor goes into business or industry or back to school for on-the-job training experiences.

How are overall goals accomplished?

Students in the carpentry class built the computer lab, which is housed in the business department.

Next came cooperation from two business teachers. These teachers took another business teacher's classes which allowed released time to teach computer technology literacy to eighteen classes. The students spent a week

in the computer lab learning computer literacy and discussing computer applications in their skill areas. As a result of this successful endeavor, a teacher with computer skills was hired full time and based in the business department in the 1985-86 school year. More equipment was purchased.

Today students come weekly to the lab to learn computer and technology literacy or programming - depending on the level of knowledge of the students. As a part of the weekly curriculum, technology is related to work experiences in the students' area of study. The social skills necessary to productive group work are stressed. These skills include sharing information, disagreeing in a constructive way, and summarizing. It may seem paradoxical to some, but computers are used to help teach these skills.

The weekly schedule provides time on Fridays for the students to take a field trip to observe current technology in their areas of study. An outgrowth of this weekly lab time has been the Technology Fair--a two-day and evening showcase where students demonstrate computer related technology for parents and perspective students. The computer teacher supervises business department students for expanded exposure on Fridays and on any other unassigned days or weeks.

An additional effort in the use of the principles of technology takes place in the small gas engines classroom. Curriculum developed by a consortium is utilized to teach physics principles while making technical applications.

Where does this lead?

The Caddo Career Center believes in the positive impact of educational technology and realizes it takes the efforts of all involved to help prepare students to enter the work force. An 18-year-old today can expect to change jobs 10 times in 50 years, each change involving new knowledge, new

skills, and new responsibilities. The Caddo Career Center strives to fulfill a students' needs. Thus, preparing each student to accept and conquer this challenge of change.

At the Caddo Career Center, there is a blend of high tech with high touch to enable students to face the technological future with confidence and hope. This innovative approach to keeping abreast of technology lays the groundwork for truly adventurous learning.

Two Common Problems:

(1) How to provide time for vocational instructors to return to the "world of work" in order to keep up-to-date on computer technology.

(2) How to provide exposure to computer applications for vocational students.

STUDENT DATA RESULTS - Spring 1985

Used Computer

47%	Yes
53%	No

Where

38%	School
56%	Home or Friends
6%	Work

Preferred Class Activities

45%	How Computers Work
18%	Programming
11%	Games
4%	Using DOS
4%	Using Printer
4%	Using Word Processing

Difficult Activities

41%	Nothing
14%	DOS
11%	Programming
11%	General Use of Machines
6%	Keyboard
1%	Most of it

To Improve Course

44%	More Time in Computer Lab
20%	Change Nothing
7%	Add Computers to Lab
7%	More Hands-on Experiences
3%	More Fundamental Instruction
3%	More Programming
1%	More Games

Recommend Course

98%	Yes
2%	No or Didn't Know

ON RELEASED TIME FROM CLASSES

Instructors

- gained a better understanding and appreciation of computers (no longer anti-computer)
- learned how computers are used in business and industries
- learned how to use technology in their areas
- saw that computers had opened jobs for new employees
- had time to discuss and observe new equipment and new methods for accomplishing tasks
- saw how businesses dealt with customers
- learned to work with new equipment
- gained knowledge which will help in updating equipment and curriculum
- were provided opportunities to learn new techniques which made their programs complete

64%	Visited Businesses
29%	Had Hands-on Experiences
7%	Went Back to School

Business and Industries Reaction

Employers are pleased

(1) that students are getting computer/ technology experience,

(2) that instructors are making a concerted effort to stay abreast of the latest technology and techniques, and

(3) that the administration has the foresight to see that this innovative approach is taking place.